Remarks

The Office Action mailed July 30, 2002, has been received and reviewed. Claims 1-5, 10-12, 15, 20, 21, 26-28, 34-36, 51 and 52 are currently pending in the application. All claims stand rejected. Applicants have canceled claims 1, 2, 3, 4, 20, 21, 26, 34, 35, 36, 51 and 52 without prejudice or disclaimer and reserve the right to present these claims in one or more related applications. Claims 5, 10, 27 and 28 have been amended and new claims 55-59 have been presented. Applicants respectfully request reconsideration of the application as amended herein.

Specification

The specification was objected to in the Office Action as assertedly lacking an abstract of the disclosure. Applicants respectfully submit that page 45 of the application as-filed sets forth an Abstract Of The Disclosure on a separate page. A copy of as-filed page 45 is submitted with this Amendment as Exhibit A. Applicants believe no further action is required on this point, but will submit a replacement Abstract, should one be required.

Correction of a typographical error at page 13, line 16 of the specification was also required in the Office Action. Applicants have amended the specification by the replacement paragraph presented herein and respectfully submit that no further action is required on this point.

Rejection of Claims

Claims 4, 20, 21, 26, 51 and 52 were rejected in the Office Action as assertedly lacking enablement under 35 USC § 112, first paragraph. Claim 4 was further rejected in the Office Action as assertedly indefinite under 35 USC § 112, second paragraph. Although applicants respectfully disagree with these assertions, these claims have been canceled herein to expedite allowance of the application, rendering this rejection moot.

Claims 1, 2, 3, 10-12, 15, 34 and 35 were rejected in the Office Action as assertedly being obvious over Alston-Mill *et al.* in view of Dufour. Although applicants respectfully disagree with this rejection, claims 1, 2, 3, 34 and 35 have been canceled herein, rendering this rejection moot as to them. Claim 10 has been amended to depend from newly independent claim 5, and applicants respectfully submit it is allowable as containing the subject matter of independent claim 5, as are

claims 11, 12 and 15 dependant therefrom. Accordingly it is requested that claims 10-12 and 15, as amended be allowed.

Applicants note the Office Action states the present specification is enabling for "a peptide comprising at least two coupled GnRH decapeptide sequence capable of inducing an immunogenic response that allows for discrimination between different types of GnRH wherein the peptide sequence is SEQ ID NO:5 [.] SEQ ID NO: 6 or SEQ ID NO:7" (Office Action at page 5). Applicants respectfully submit that all remaining claims, as amended, are enabled and request they be allowed.

Applicants further note that claims numbered 60-81 were presented in a Preliminary Amendment filed September 12, 2000, and were not entered. To the extent necessary, please cancel such claims.

CONCLUSION

All pending claims are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Office determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact applicants' undersigned attorney.

Respectfully Submitted,

Bretton L. Crockett

Registration Number 44,632

Attorney for Applicant

TRASKBRITT, P.C.

P.O. Box 2550

Salt Lake City, Utah 84110

Telephone: (801) 532-1922

BLC

Date: December 30, 2002

Enclosure: Version With Markings to Show Changes Made

Exhibit A (Page 45--Abstract Of The Disclosure)

VERSION SHOWING CHANGES MADE

IN THE SPECIFICATION:

Please substitute the following replacement paragraph for the paragraph located at page 2, lines 5 through 9 of the specification.

This application is a continuation-in-part of application serial number 09/274,048 filed 22 March[,] 1999, now U.S. Patent No. 6,284,733, issued 4 September 2001, which is a continuation of application serial number 08/981,557 filed [7 June 1995] 5 December 1997, now U.S. Patent No. 5,885,966, issued 23 March 1999, as a national entry application under PCT/NL96/00223 filed 6 June 1996, which claims priority under U.S. application [08/447]08/477,298 filed 7 June 1995 and U.S. application 08/476,013 filed 7 June 1995.

Please substitute the following replacement paragraph for the paragraph located at page 13, lines 13 to 16 of the specification.

Figure 4: Immunocastration efficacy score of several groups of pigs immunized with GnRH-tandem-dimer peptides (62 mg) conjugated to ovalbumine and Specol used as an adjuvant. The staring peptide was GnRH tandem (Cys-OH) dimer (abbreviated Cys-OH). Of this peptide all alanine scan peptides were used for immunization. Immunocastration efficacy was rated on a scale of 1 to 4 (1 = immunocastration did not occur, 2 = a minority of the pigs were immunocastrated, 3 = a majority of the pigs [was] were immunocastrated, [2] and 4 = all pigs were immunocastrated).

IN THE CLAIMS:

Please cancel claims 1, 2, 3, 4, 20, 21, 26, 34, 35, 36, 51 and 52 without prejudice or disclaimer.

Please amend the remaining claims as follows:

5. (Three times amended) [The] A peptide comprising a modified tandem GnRH decapeptide sequence capable of inducing an immunogenic response that allows for discrimination

between different types of GnRH, [of claim 1 wherein] said peptide [is] selected from the group consisting of [:] SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

- 10. (Three times amended) A vaccine comprising the peptide of claim [1] 5.
- 27. (Two times amended) [The] A peptide [of claim 3 wherein] comprising a modified tandem GnRH decapeptide sequence capable of inducing an immunogenic response that allows for discrimination between different types of GnRH, said peptide [is] comprising at least two coupled GnRH decapeptide sequences wherein at least one of the amino acids of said coupled GnRH decapeptide sequences is replaced by a different amino acid, and selected from the group consisting of [:] SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.
- 28. (Two times amended) [The] A peptide [of claim 4 wherein] comprising a modified tandem GnRH decapeptide sequence comprising a different amino acid comprising Ala, said peptide [is] capable of inducing an immunogenic response that allows for discrimination between different types of GnRH and selected from the group consisting of [:] SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.